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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,170	07/22/2003	Richard H. Henze	10003479-6	8242

7590 03/18/2005

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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Fort Collins, CO 80527-2400

EXAMINER

TUGBANG, ANTHONY D

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,170

Applicant(s)

HENZE ET AL.

Examiner

A. Dexter Tugbang

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/22/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. This application does contain the necessary reference to the prior application, i.e. 09/654,489, in the Transmittal filed originally with the application on 7/22/03, as the first sentence of the specification. However, the reference does not contain the current status of the nonprovisional parent application, which is that the application matured into U.S. Patent 6,639,753. The specification should be amended to reference the current status.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A Method of Forming a Head Assembly.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3 and 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Nanjyo 5,161,300.

Nanjyo discloses a method of forming a head assembly comprising: providing a base member (core block 1) as a wafer substrate (in Fig. 1); forming head components (core blocks

13, 14) upon the base member; providing component regions (glass 15) adjacent respective ones of the head components; providing a support region (core block 2) intermediate adjacent ones of the head components and positioned to support the media moving along a moving path of travel (see Fig. 6). The support region 2 comprises a material of ferrite (see col. 3, lines 58-60), which is of a different material than the component regions 15 comprised of glass.

Regarding Claim(s) 2 and 3, being that the support region is made of a metal ferrite, it would have properties that would have a greater hardness, and a greater resistance to wear, compared with the non-metallic material of glass of the component regions.

Regarding Claim(s) 7 and 8, the support region 2 is formed upon a cover member, which is placed adjacent, or on, the base member 1. Furthermore, portions of the support region or cover member, are removed, or machined (see sequence of Figs. 1 and 2).

Regarding Claim(s) 9, the support region 2 is deposited, or placed, over the base member 1.

Regarding Claim(s) 11, the head components of Nanjyo are capable of communicating digital information relative to the media comprising a magnetic tape (see col. 2, lines 48+).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nanjyo.

Art Unit: 3729

Nanjyo discloses the claimed manufacturing method as relied upon above. Nanjyo does not mention that the head components are formed to include a read element and a write element. However, the examiner takes Official Notice that forming read and write elements are conventional, old, and notoriously well known in the art of manufacturing head components, or magnetic heads.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Nanjyo by including the conventional aspects of forming read and write elements, to provide the advantages of having head components that can read and write information to the magnetic storage medium during operation.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nanjyo in view of the Applicant(s) Admitted Prior Art, referred to hereinafter as the AAPA.

Nanjyo teaches the claimed manufacturing method as previously discussed. Nanjyo does not mention forming the head components using Linear Tape Open technology. The AAPA (specification, page 1) teaches that forming head components by Linear Tape Open technology provides a format of enhanced high capacity storage.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Nanjyo by forming the head components with Linear Tape Open technology, as taught by the AAPA, to advantageously provide a format of enhanced high capacity storage.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nanjyo in view of Japanese Patent JP 1-220207, referred to hereinafter as JP'207.

Art Unit: 3729

Nanjyo discloses the claimed manufacturing method as previously relied upon above and further including that the component regions are formed of an insulating layer of glass. Nanjyo does not mention that the portions of the insulating layer are removed.

JP'207 teaches that removing portions of the insulating layer, i.e. glass, by grinding, removes any excess insulating layer materials and improves the dimensional accuracy between gaps (see PURPOSE).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Nanjyo by including the step of removing portions of the insulating layer (glass), as taught by JP'207, to remove any excess insulating layer and improve the dimensional accuracy.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

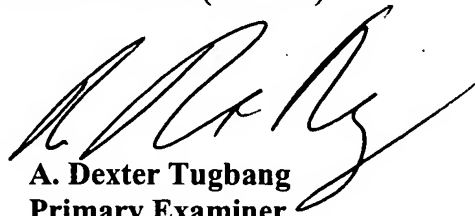
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 571-272-4570.

The examiner can normally be reached on Monday - Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3729

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



A. Dexter Tugbang
Primary Examiner
Art Unit 3729

March 6, 2005